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LW 3/88 (rev 6/92)

SB 8807

:I-T-7003

57-S-4390-55

DOCUMENT SUMMARY

Title: TRICHLOROETHYLENE, STABILIZED DEGREASING (SUPERSEDED BY O-T-634)

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Aeronautical Systems Center

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HISTORICAL DOCUMENT LINKS

<DH9009> MIL-T-7003 TRICHLOROETHYLENE, STABILIZED DEGREASING (SUPERSEDED BY O-T-634)

SB 8808

MIL-T-39a
51-S-4390-55

MIL-T-7003
5 September 1950

MILITARY SPECIFICATION

TRICHLORETHYLENE; STABILIZED DEGREASING

This specification was approved by the Departments of the Army, the Navy, and the Air Force for use of procurement services of the respective Departments, and supersedes the following specification:

AN-T-37a
26 November 1945

This specification consists of this cover sheet and Specification AN-T-37a, dated 26 November 1945, modified as follows:

Paragraph 6-4a. Delete "Specification AN-T-37a" and substitute "Specification MIL-T-7003."

Copies of this specification may be obtained from the Commanding General, Air Materiel Command, Wright-Patterson Air Force Base, Dayton, Ohio; or the Commanding Officer, U. S. Naval Air Station, Johnsville, Pennsylvania.

When a request for this specification is received by a supplying activity, it will be necessary to attach this cover sheet to the pertinent specification before issue.

Custodian:
Air Force

Other interest:
Navy - BuAer

-oOo-

THIS DOCUMENT HAS BEEN SUPERSEDED BY:
MIL-T-6344B

1992

SB 8809

53-S-1910

MIL-STD-666A
15 May 1962

SUPERSEDING
MIL-STD-666 (QMC)
17 July 1961

MILITARY STANDARD

DRY CLEANING OF CLOTHING AND EQUIPAGE

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1962

FSC 8400

SB 8810

515-1454

MIL-D-12150D

29 December 1967

SUPERSEDING
MIL-D-12150C(GL)
3 February 1965

MILITARY SPECIFICATION

DETERGENT, DRY CLEANING SOLVENT

This specification is mandatory for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 This specification covers the requirements for one type and grade of dry cleaning detergent (see 6.1).

2. APPLICABLE DOCUMENTS

* 2.1 The following documents, of the issue in effect on the date of invitation for bids or request for proposal, form a part of the specification to the extent specified herein:

SPECIFICATIONS

FEDERAL

O-P-191	- Perchloroethylene (Tetrachloroethylene); Technical Grade.
P-D-680	- Dry Cleaning Solvent.
PPP-B-636	- Box, Fiberboard.
PPP-C-96	- Cans, Metal, 28-Gage and Lighter.
PPP-F-320	- Fiberboard; Corrugated and Solid, Sheet Stock (Container Grade), and Cut Shapes.

STANDARDS

FEDERAL

Fed. Test Method Std. No. 536	- Soap and Soap Products (Including Synthetic Detergents); Sampling and Testing.
Fed. Test Method Std. No. 791	- Lubricants, Liquid Fuels, and Related Products; Methods of Testing.

MILITARY

MIL-STD-105	- Sampling Procedures and Tables for Inspection by Attributes.
MIL-STD-129	- Marking for Shipment and Storage.

FSC 7930

SB 8811

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MIL-C-10659 68 ■ 9999906 0115597 5 ■

51-C-1150

MIL-C-10659
(CmlC)
7 November 1950
SUPERSEDING
Army 96-21-19
7 February 1940

MILITARY SPECIFICATION

CHLOROFORM (TECHNICAL)

1. SCOPE

1.1 This specification covers a single grade of chloroform ($CHCl_3$) for use in the manufacture of chemicals.

2. APPLICABLE SPECIFICATIONS AND OTHER PUBLICATIONS

2.1 Specifications.- The following specifications, of the issue in effect on date of invitation for bids, form a part of this specification:

FEDERAL SPECIFICATION

TT-P-141	Paint, Varnish, Lacquer, and Related Materials; Methods of Inspection, Sampling, and Testing

U. S. ARMY SPECIFICATIONS

94-40645	-Marking; Exterior, Domestic and Export Shipment, by Contractors
100-2	-Standard Specifications for Marking Shipments by Contractors

NAVY DEPARTMENT SPECIFICATION

General Specifications for Inspection of Material.

(Army.- Copies of specifications may be obtained from the procuring agency or as directed by that agency. Both the title and identifying number or symbol should be stipulated when requesting copies.)

(Navy.- Copies of Federal Military, and Navy Department specifications may be obtained upon application to the Bureau of Supplies and Accounts, Navy Department, Washington 25, D. C., except that activities of the Armed Forces should make application to the Commanding Officer, Naval Supply Depot, Scotia 2, N. Y. Both the title and identifying number or symbol should be stipulated when requesting copies.)

(Air Force.- Copies of Federal, Military, and U. S. Army specifications may be obtained upon application to the Commanding General, Air Development Force, Wright-Patterson Air Force Base, Dayton, Ohio. Both the title and identifying number or symbol should be stipulated when requesting copies.)

THIS DOCUMENT CONTAINS 5 PAGES.

2.2 Other publications.- The following publications, of the issue in effect on date of invitation for bids, form a part of this specification:

BUREAU OF SUPPLIES AND ACCOUNTS PUBLICATION

Navy Shipment Marking Handbook

(Copies of the Navy Shipment Marking Handbook may be obtained up on application to the Bureau of Supplies and Accounts, Navy Department, Washington 25, D. C. except that activities of the Armed Forces should make application to the Commanding Officer, Naval Supply Depot, Scotia 2, N. Y.)

INTERSTATE COMMERCE COMMISSION REGULATIONS

Regulations for Transportation of Explosives and Other Dangerous Articles, etc.

(Information as to the availability of Interstate Commerce Commission Regulations for Transportation of Explosives and Other Dangerous Articles, etc., may be obtained from the Interstate Commerce Commission, Washington 25, D. C.)

3. REQUIREMENTS

3.1 Chemical and physical requirements.- The chloroform shall conform to the chemical and physical requirements shown in table I.

Table I. - Chemical and physical requirements

Requirement	Maximum	Minimum
Specific gravity at 25°/25° C	1.488	1.474
Residue per 50 ml. of specimen	0.001 gm	----
Impurities:		
Acid (calculated as hydrochloric acid)	0.002%	-----
Free chlorine	None	-----
Phosgene	None	-----
Boiling range:		
Distilling between 60° and 62° C at 720 mm. pressure	---	95%

3.2 Odor.- No foreign odor shall be perceptible during the evaporation of the chloroform and no odor shall be perceptible after the chloroform has evaporated.

3.3 Stabilizer.- A suitable stabilizer such as ethyl alcohol shall be added to the chloroform by the contractor, but the amount added shall not exceed 1 percent by weight. Each bidder shall furnish a statement giving the name and percent by weight of the stabilizer to be added.

4. SAMPLING, INSPECTION AND TEST PROCEDURES

4.1 Lot

4.1.1 Batch process. - A lot shall consist of the material produced from no more than one manufacturing batch. (See 6.2)

4.1.2 Continuous process. - A lot shall consist of the material produced in no more than one work shift with no change in process or materials.

4.2 Sampling. - Ten specimens shall be selected as representative of each lot. The specimens may be selected randomly from containers or during the container filling operation. The specimens shall be placed in clean, dry containers, and labeled to identify the container and lot represented. Each specimen shall be tested according to 4.4.

4.3 Inspection.

4.3.1 Naval purchase. - For Naval purchases, the general inspection procedures shall be in accordance with the General Specifications for Inspection of Material.

4.3.2 Packing and marking. - The inspector shall inspect the packing and marking of the material for compliance with Section 5.

4.4 Tests. - All specimens shall be examined for compliance with the specific gravity requirements. Inspec tion may be stopped if any specimen fails to meet this requirement. Providing all specimens meet the specific gravity requirement, three of the ten specimens shall be subjected to the tests of 4.4.2 and 4.4.4 to 4.4.8 inclusive.

4.4.1 Reagents. - Analytical reagent grade chemicals and distilled water shall be used throughout the tests. Blank determinations shall be run in parallel with each test, using the same quantities of reagents used in the test, and corrections shall be applied when significant.

4.4.2 Boiling range. - Distill 100 ml. of the specimen using the apparatus and methods described under Method No. 430.1 of Specification TT-P-141, with the following modifications: The me thod is to be used only so far as it applies to material boiling normally between 60° and 62° C corrected to 760 mm. barometric pressure. Substitute for the thermometer described therein a precision type thermometer with a range of 0° to 100° C graduated in 0.1°. For the distillation measure 100 ml. of the specimen in the graduated cylinder between 0° and 3° C by cooling in a clear brine bath provided with a stirrer and iced sufficiently to maintain the temperature within this range. Using the same graduate and the same means for maintaining the temperature at 0° to 3° C., determine the volume of distillate received between 60° and 62° C corrected to 760 mm.

4.4.3 Specific gravity. - Determine the specific gravity of the representative specimen of chloroform at 25°/25° C by means of a pycnometer or Westphal balance.

4.4.4 Residue. - Pipette into a tared platinum evaporating dish 50 ml. of the representative specimen of chloroform , evaporate to dryness on a steam bath, and heat the residue in an oven for 30 minutes at 105° ± 5° C. Cool in a dessicator and weigh. The residue from the 50 ml. specimen shall not weight more than 0.001 grams.

4.4.5 Odor. - Saturate a piece of filter paper (11 cm. diameter) with a portion of the representative specimen of chloroform and note the odor during evaporation and after it has evaporated. No foreign odor shall be perceptible during the evaporation and the residue shall be odorless.

4.4.6 Acid. - Pipette 25 ml. of the representative specimen of chloroform into a 250 ml. glass-stoppered Erlenmeyer flask and add 25 ml. of water. Place the glass stopper in the flask, and shake for five minutes. Titrate with standardized 0.01N sodium hydroxide. Calculate the acidity as hydrochloric acid as follows:

$$\text{Percent acid as HCl} = \frac{\text{ml. NaOH solution} \times N \times 3.65}{\text{ml. of specimen} \times \text{Sp. Gr.}}$$

= normality of NaOH solution.

4.4.7 Chlorine. - Shake for 2 minutes 10 ml. of the representative specimen of chloroform with 10 ml. of water, add 2 drops of 10 percent potassium iodide and 2 drops of starch solution. A blue color indicates the presence of chlorine.

4.4.8 Phosgene. - Overlay 10 ml. of the representative specimen of chloroform with a sufficient volume of clear saturated barium hydroxide solution to form a layer about 1/4-inch deep. The formation of a white film at the junction of the two liquids indicates the presence of phosgene.

4.5 Rejection and resubmission. - If any specimen selected as specified in 4.2 fails to conform to this specification, the lot shall be rejected. The contractor, at no expense to the Government, shall have the option of having an analysis made on each container in the lot, removing the nonconforming material, and resubmitting the remaining portion of the lot for acceptance testing. If any specimen taken from the resubmitted portion of the lot fails to conform to this specifications, the lot shall be finally rejected.

5. PREPARATION FOR DELIVERY

5.1 Packing. - The chloroform shall be shipped in 30- or 55-gallon steel drums complying with Specification 5A of the Interstate Commerce Commission Regulations for Transportation of Explosives and Other Dangerous Articles, etc., and having two bung openings located on opposite sides of the head.

5.2 Marking. - In addition to any special marking required by the contract or order, all shipping containers for the Army shall be marked in accordance with Specification 100-2; for the Air Force, in accordance with Specification 94-40645; for the Navy, in accordance with the Navy Shipment Marking Handbook.

6. NOTES

6.1 Ordering data. - Procurement documents should specify title, number, and date of this specification.

6.2 Batch. - A batch is defined as that quantity of material which has been subjected to some unit chemical or physical mixing process intended to make the final product substantially uniform.

6.3 Inspection. - Inspection will not necessarily include all specification requirements; however, the omission of inspection does not constitute a waiver of these requirements.

6.4 Sampling and testing. - If the contractor consistently produces high-quality material and operates under a system of quality control acceptable to the Government, the Government, at its discretion, may modify, in whole or in part, the sampling and testing procedures specified herein. However, the Government reserves the right to return at any time, without previous notice to the contractor, to the sampling and testing procedures specified in this specification.

Custodian:

Army - Chemical Corps

Other interest:

51-C-1646

MIL-C-1068A

15 FEBRUARY 1952

SUPERSEDING

AN-C-1068

18 April 1949

OBSOLET

MILITARY SPECIFICATION

COMPOUND, WATER-REPELLENT, TEXTILE FINISH

This specification was approved by the Departments of the Army, the Navy, and the Air Force for use of procurement services of the respective Departments.

1. SCOPE

1.1 Scope.—This specification covers textile finish, water repellent compounds suitable for use by laundries and dry cleaning plants in the treatment and retreatment of clothing and equipment items to provide adequate water repellancy during use of the treated item.

1.2 Classification.—Textile finish water repellent compounds shall be of the following types, as specified (see 6.1):

Type I —Aqueous application.

Type II—Solvent application.

2. APPLICABLE SPECIFICATIONS, STANDARDS, DRAWINGS, AND PUBLICATIONS

2.1 The following specifications and standards of the issue in effect on date of invitation for bids, form a part of this specification:

SPECIFICATIONS

FEDERAL

P-S-566 —Soap; Chip.

P-S-661 —Solvent; Dry-Cleaning.

TT-E-485 —Enamel; (for) Drums, and Other Metal Products, Rust-Inhibiting, Olive Drab.

VV-L-791 —Lubricants, Liquid Fuels, and Related Products, Methods of Sampling and Testing.

CCC-T-191 —Textiles; General Specifications, Test Methods, and Supplement thereto.

MILITARY

MIL-C-342 —Cloth, Cotton, Wind Resistant, Twill and Poplin.

NAVY DEPARTMENT

General Specifications for Inspection of Material.

STANDARDS

MILITARY

MIL-STD-105—Sampling Procedures and Tables for Inspection by Attributes.

MIL-STD-129—Marking of Shipments.

(Copies of specifications, standards, and drawings required by contractors in connection with specific procurement functions should be obtained from the procuring agency or as directed by the contracting officer.)

2.2 Other publications. — The following publication, of the issue in effect on date of invitation for bids, unless otherwise stated, forms a part of this specification:

INTERSTATE COMMERCE COMMISSION

Regulations for Transportation of Explosives and Other Dangerous Articles, etc.

[illegible]329—52—(146)

SB 8817

(Application for copies should be addressed to the Interstate Commerce, Commission, Washington 25, D. C.)

3. REQUIREMENTS

3.1 Preproduction sample approval.—Before production is commenced, unless otherwise specified in the contract or order, two 1 quart samples shall be submitted to the procuring activity for approval.

3.2 Composition.—No formal composition requirements are included in this specification except that the sulfate (SO_4) shall not exceed 0.1 percent and chloride shall not exceed 0.1 percent. The manufacturer shall furnish sufficient information to the procuring activity as to formulation so that chemical and physical tests can be made on deliveries to guarantee that they are the same as preproduction sample.

3.3 Toxicity. — Compound shall be nontoxic. The contractor shall obtain toxicity approval from the procuring activity.

3.4 Characteristics.—Fabrics treated with either type I or II compound shall have water repellency conforming to requirements specified herein (see tables I and II). The compounds shall be light-colored and shall have no deleterious effect on fabrics; shall not affect the color; shall not impart stiffness, greasiness, or obnoxious odor. The reduction in air permeability shall not exceed the value of 6 when tested in accordance with method 5450 of Specification CCC–T–191.

3.5 Type I compound.—Type I compound as received shall conform to the following:

3.5.1 *Stability to centrifuging.*—Compound shall remain substantially homogeneous and not more than 5 percent of the solids content shall separate when tested as specified in 4.3.1.

3.5.2 *Homogeneity.*—When tested as specified in 4.3.2, the components of the compound shall not separate to such an extent that slight stirring or agitation will not bring it back to its original condition. There shall be no more than a slight incrustation at the liquid level due to drying action. A clear layer separating at the bottom shall not exceed 15 percent.

3.5.3 *Stability to temperature extremes.*—Compound shall remain stable and shall not show evidence of separation when tested as specified in 4.3.3.

3.5.4 *Stability in water.*—The compound shall be stable and applicable in water having a pH range of 5.0 to 8.5 at the time of adding compound. The treating bath, of any concentration up to 8 percent, shall remain stable and applicable when held for 30 minutes at any temperature between 50 and 120°F. when tested as specified in 4.3.4.

3.5.5 *Performance.* — Fabric specified in 4.3.6, treated as specified in 4.3.6.1, shall meet the performance requirements shown in table I when tested as specified in 4.3.7.

TABLE I.—*Performance requirements for type I.*

	Spray rating (min.)	Hydrostatic pressure (min.)	Dynamic absorption (max.)
		Centimeters	*Percent*
Initially	80	30	30
After 2 hours wet mechanical action	70	25	38
After accelerated weathering	70	25	35

3.6 Type II compound.—Compound may be supplied in either solvent-free form or mixed with hydrocarbon solvent suitable for drycleaning. Compound shall be readily dissolved in dry cleaning solvent conforming to Specification P–S–661 at 85°F. with no more

stirring or agitation than that produced by a commercial reversing type dry-cleaning wheel.

3.6.1 *Flash point.*—Flash point shall be not less than 100°F. when tested as specified in 4.3.5.

3.6.2 *Performance.* — Fabric specified in 4.3.6, treated as specified in 4.3.6.2, shall meet the performance requirements shown in table II when tested as specified in 4.3.7.

TABLE II.—*Performance requirements for type II.*

	Spray rating (min.)	Hydrostatic pressure (min.)	Dynamic absorption (max.)
		Centimeters	*Percent*
Initially	90	30	30
After 2 hours wet mechanical action	70	25	35
After accelerated weathering	70	25	35

3.9 Workmanship. — Compound shall be clean, uniform, and free from any defects which might impair its utility.

4. SAMPLING, INSPECTION, AND TEST PROCEDURES

4.1 Sampling. — Sampling shall be conducted in accordance with Standard MIL-STD-105.

4.2 Inspection.—Inspection will be made by the Government to determine compliance with this specification.

4.2.1 *Inspection procedure.* — For Naval purchases, the general inspection procedures shall be in accordance with General Specifications for Inspection of Material.

4.3 Tests.

4.3.1 *Stability to centrifuging.*—Centrifuge at a speed of 1000 r.p.m. for 15 minutes. The temperature of the compound prior to centrifuging shall be 100°F. The test apparatus used shall be that specified in method 300.3 of Specification VV-L-791.

4.3.2 *Homogeneity.*—One hundred ml. of the well-stirred compound shall be placed in a 100 ml. unstoppered cylinder and allowed to stand unmolested for 72 hours at 160°F.

4.3.3 *Stability to temperature extremes.*—Place separate 100 ml. samples in stoppered graduates and treat as follows: (a) Cool one sample to 0°F., then heat to 160°F. and return to room temperature, (b) Heat the second sample to 160°F., then cool to 0°F. and return to room temperature. Each transition period in these tests shall require 2 to 4 hours.

4.3.4 *Stability in water.*—(a) Disperse 8 gm. of type I product in 52 ml. distilled water previously adjusted to 50°F.; (b) Disperse another 8 gm. of product in 92 ml. distilled water previously adusted to 120°F. Both mixtures shall remain true emulsions after standing unmolested for 30 minutes. Repeat (a) and (b) above with the water adjusted to pH 8.5 with Na_2CO_3.

4.3.5 *Flash point.*—Test in accordance with method 110.2 of Specification VV-L-791.

4.3.6 *Application of compound to fabric swatches for performance tests.*—The cloth used for test purposes shall conform to the requirements for cloth, cotton, wind resistant, poplin, type II, class A of specification JAN-C-342. The cloth shall be taken from a single standard lot maintained at the Philadelphia Quartermaster Depot for this purpose. All performance tests for acceptance and delivery shall be based on the use of this cloth.

4.3.6.1 *Type I.*—Three 1 yard pieces of the above fabric used in testing type I, compound

shall be given one laundering, in accordance with table III prior to treatment with the water repellent compound, using a reversing type of wash wheel. The soap chip, conforming to Specification P–S–566, shall be made into a suitable stock solution. The pieces shall be cut into 8 by 8 inch swatches after this treatment.

Laundering formula prior to treatment

Fixed Installation Formula—30 lb. load

	Time	Water level	Temperature
	Minutes	*Inches*	*°F.*
1. Soap (.25 percent)	5	6	100
2. Soap (.20 percent)	5	6	140
3. Soap (.20 percent)	5	6	140
4. Water	3	8	140
5. Water	3	8	140
6. Water	3	8	120
7. Water	3	8	120
8. Water	3	8	100

The fabric or swatches shall have a pH of 6.5 after this treatment and should be used at once after laundering, or if dried they shall be "wet out" by immersion in distilled water at 70 to 90°F. for a minimum of 30 minutes, and let drain until the fabric contains approximately 100 percent pick-up of moisture. Eight percent by weight of the original compound based on the conditioned dry weight of the cloth, shall be dispersed in an amount of distilled water equal to two times the conditioned dry weight of the cloth. The "wet-out" cloth shall then be placed in the solution and run in a Launder-O-Meter (or similar apparatus) without balls at 100°F. for 10 minutes. The sample of cloth shall then be removed, extracted in the usual manner (approximately 50 percent pick-up) and dried at 160°F. for a minimum of 60 minutes. The swatches shall then be cold-pressed by placing a large flat weight (see method 5508, par. 4.5 of Specification CCC–T–191) on a stack of the swatches for a minimum of 1 hour.

4.3.6.2 *Type II (Solvent application).*—All fabric used in testing type II compounds shall be given one dry cleaning prior to treatment with the water repellent compound as follows: Run for 20 minutes in clean dry cleaning solvent (P–S–661) using a reversing type of wash wheel (do not use soap or other material), extract, and dry at 200°F., for a minimum of 60 minutes. A dry cleaning solvent solution containing 20 percent by weight of compound is adjusted to a temperature of 85°F. or until the compound disperses readily. Cut the conditioned fabric into strips 11 to 12 inches wide and weigh. Immerse the strips in the dry cleaning solvent solution of the compound. Agitate for 2 to 5 minutes, remove the strips, pass them through a household type wringer and quickly re-weigh. Based upon pick-up, the concentration of the solution shall be adjusted to deposit 5 percent of the compound, as received, upon the fabric. (Example: 100 gm. of conditioned fabric, which weighs 190 gm. after immersion and passage through a wringer (90 percent pick-up) must have a concentration of 5.55 percent to deposit 5 percent of the compound). Dry the strips at 200°F. for a minimum of 60 minutes. Cut the strips into 8 by 8 inch swatches. The swatches are then cold pressed by placing a large flat weight (see 4.3.6.1) on a stack of swatches for a minimum of 1 hour.

4.3.7 *Performance, type I or II compounds.*

4.3.7.1 *Conditioning.* — The treated swatches shall be conditioned a minimum of 4 hours at 65 ±2 percent relative humidity and 70 to 80°F. prior to testing. A minimum of five swatches shall conform to 3.5.5 and 3.6.2, as applicable.

4.3.7.2 *Procedure.*

4.3.7.2.1 *Spray resistance.*—Spray resistance shall be conducted in accordance with method 5526 of Specification CCC–T–191.

4.3.7.2.2 *Hydrostatic resistance.* — Hydrostatic resistance shall be conducted in accordance with method 5514 of Specification CCC–T–191.

4.3.7.2.3 *Dynamic absorption.* — Dynamic absorption shall be conducted in accordance with method 5500 of Specification CCC-T-191.

4.3.7.2.4 *Wet mechanical action.*—A set of five treated swatches shall be run in the same tumbler-jar equipment specified in 4.3.7.2.3 (free of all soaps, detergents, and wetting agents) with 2 liters of distilled water for 2 hours. Swatches shall be removed, dried in circulating air at temperature not exceeding 100°F. and conditioned a minimum of 4 hours at 65 ± 2 percent relative humidity and 70 to 80°F. prior to testing.

4.3.7.2.5 *Accelerated weathering.*—Accelerated weathering shall be conducted in accordance with method 5804 of Specification CCC-T-191 for a period of 10 hours.

5. PREPARATION FOR DELIVERY

5.1 Packing.

5.1.1 *Type I compound.*—Five gallons of the product shall be packed in a paraffin lined tight wooden keg with easy take-out head conforming to Specification 10A of I.C.C. Regulations for Transportation of Explosives and Other Dangerous Articles, etc. Lining shall be paraffin wax having a minimum melting point of 125°F.

5.1.2 *Type II compound.*—Five gallons of the product shall be packed in a leak-proof 5 gallon full opening lug cover type, round, beaded top metal container made from 24 gage bonderized steel throughout. The inside diameter of the container shall be approximately 11¼ inches and the overall height approximately 13¼ inches. The bottom chime shall be compound-lined and double-seamed to container body and side seam shall be welded. The container shall be fitted with an 8 gage galvanized wire bail with wood grip and having ears firmly riveted or welded to body. The cover shall be made with not less than 16 lugs and shall be fitted with a securely affixed gasket of suitable composition. The container shall be coated on the inside with suitable protective enamel, if so specified, and the exterior shall be coated overall with an enamel complying with Specification TT-E-485. The container shall be offset to permit stacking.

5.2 Marking.—Shipping containers shall be marked in accordance with Standard MIL-STD-129 and in addition as follows:

5.2.1 *Type I compound.*—Type I compound shipping containers shall be marked in accordance with Specification 10A of I.C.C. Regulations for Transportation of Explosives and Other Dangerous Articles, etc. In addition to the above marking the following marking shall be either printed, burned in, or stencilled on the removable head of keg in letters ½ inch in height:

TO REMOVE HEAD
DRIVE HEAD LOOP ABOVE RIM

On the other end of keg, the following marking shall be shown in ½ inch letters:

OPEN OTHER END

Two labels, conforming to 4.1.5 of Standard MIL-STD-129, bearing instructions for application of the compound in laundries, dry cleaning plants, and by manual dipping, shall be securely affixed to the container on diametrically opposite sides and positioned near the head and away from the bilge. Instructions shall be in accordance with the following form.

INSTRUCTIONS FOR TYPE I COMPOUND:

Method of Application	*Gallons of Water*	*Amount of Compound to Add*	*Time Required*
Mobile Laundry Wash wheel (60 lbs. Dry Clothes)	20 gallons approximately (2-in. level)	———	Run in wheel 10 min.
42 inch x 84 inch Laundry Wash-Wheel (350 lbs. Dry Clothes)	80 gallons approximately (4-inch level)	———	Run in wheel 10 min.
Tank or Vat Manual Dipping	20 gallons	———	Dip up and down for 3 to 5 minutes.

NOTE: Amounts to use in other sizes of machines, wash wheels, tanks or vats are in same proportion.

"Applicable Instructions:

Clothes are washed in the usual manner. Best results can be obtained only if clothes are thoroughly rinsed to remove all soaps before treating with water repellent. *Do not use laundry sour.* Stir compound thoroughly before removing from container. (Additional information may be included)."

5.2.2 *Type II compound.*—Type II compound containers shall be marked in accordance with I.C.C. Regulations for Transportation of Explosives and Other Dangerous Articles by Freight. In addition to the above marking, the following special marking shall be printed or stencilled on side of container:

INSTRUCTIONS FOR TYPE II COMPOUND:

Method of application	*Amount of compound to add per 10 gallons solvent**	*Time required for application*
Dry-cleaner wash wheel	———	Run in wheel 5 minutes
Tank or Vat (Manual Dipping)	———	Dip up and down 3 to 5 minutes.

NOTE: (Small or larger amounts are made up in same proportion).

"Applicable Instructions:

Clothes are dry-cleaned in usual manner (best results can be obtained only if clothes are thoroughly rinsed with clean solvent to remove all soap and detergents; *if possible, omit use of soap and spot-removers*), extracted, and dried. Make sure compound is dissolved before putting clothes into treating solution. Treat clothes specified time, extract *lightly* (shut off extractor as soon as it reaches top speed), and dry (in a tumbler, if possible). (Additional information may be included)."

*Stoddard, White, or de-leaded gasoline, perchlorethylene, etc. *CAUTION*: When using inflammable solvent.

6. NOTES

6.1 Ordering Data. — Procuring documents should specify the following:

a. Title, number, and date of this specification.

b. Type required (see 1.2).

6.2 Compound, water repellent, should be procured in quantities for use within a reasonably short time preferably no longer than 6 months, as long storage is detrimental to compound.

6.3 Greatest efficiency may be obtained from type II compound when fabrics are given the usual dry cleaning, up to and including drying, then treated with compound according to manufacturer's instructions for application.

6.4 This compound is for the use of Military and commercial laundries and dry cleaning plants in the treatment and re-treatment of clothing and equipment items. Normally these compounds will be applied as specified in the instructions, paragraphs 5.2.1 and 5.2.2. The application may be varied, however, to meet certain special conditions.

6.5 Method 110.2 of Specification VV-L-791, test for flash point, is similar to A.S.T.M. Method D93-46.

6.6 The hydrostatic pressure machine specified in 4.3.7.2 is similar to the apparatus described in A.A.T.C.C. 1940 year book, page 223. An apparatus of this type is made by the Alfred Suter Company, New York, N Y., Richmond Machine Company, Philadelphia, Pa., and George Eakins, Maplewood, N. J.

6.7 Yardage of the standard cloth, cotton, wind resistant, type II, poplin specified in 4.3.6 for the performance test may be obtained from the Philadelphia Quartermaster Depot, 2800 S. 20th Street, Philadelphia 45, Pa.

Custodian:
Army—Quartermaster Corps

Other Interest:
Army—MT
Navy—SMC
Air Force.

GPO 51-282550

SB 8823

2381

U. S. AIR FORCE
SPECIFICATION
NOTICE

MIL-C-1068A
NOTICE 1
21 April 1960

MILITARY SPECIFICATION

COMPOUND, WATER-REPELLENT, TEXTILE FINISH

This notice should be filed in front of or in place of Specification MIL-C-1068A dated 15 February 1952.

1. Subject specification is no longer used for Air Force procurement.

2. For Air Force procurement, use superseding specification TT-W-156 WATER-REPELLENT COMPOUND, TEXTILE FINISH.

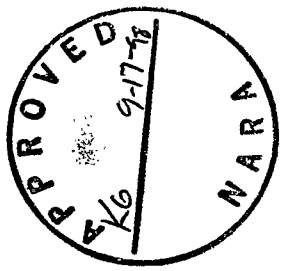
SB 8824

(Copies of specifications, standards, drawings, and publications required by contractors in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer).

WWRCEM-2
LWG/CLB/rlj

FSC 8030

M&M Corp., Dayton, Ohio
5/60 617



SB 8825